

28 December 1994

PETITION FOR RULE MAKING
Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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In the matter of

Amendment of Section 97.301
(Authorized frequency bands.)

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It is proposed that the FCC authorize an additional frequency band, in the region of 300.000 MHz to 305.000 MHz. It is noted that frequencies in this region are currently allocated for Military usage and, as such, may be available for reallocation in the near future. The reasoning behind such proposal follows.

It is noted in the book, VHF/UHF Manual (4th ed.), by G.R. Jessop, G6JP, (1992, Radio Society of Great Britain) in the section on Propagation (pg. 2.2) that "In 1980 the amateur service was invited to contribute to a symposium on Sporadic-E held at the Appleton Laboratory, and it was clear the amateur activities in this mode of propagation came as a surprise to many of the distinguished authorities present. It is now acknowledged by them that such a mode does exist at frequencies that may exceed 200 MHz for short intervals of time, but the feeling is that it may not be sporadic-E at all, but an entirely different mechanism as yet unidentified."

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The amateur radio community is well known for their interest in experimentation, and studies in propagation. It is proposed that the inclusion of a "new" frequency allocation is required for revealing the suspected propagation mode. Once this mode is understood, other frequencies being allocated nearby for Commercial usage would gain immediately in that longer propagation paths could be controlled to reduce interference on simplex frequencies and to extend ranges in desired directions. To insure a real commitment by the amateur community, this allocation shall be made permanent. To insure an immediate gain to Commercial interests, emissions shall be limited to simplex operation. To insure meaningful and relevant data transmissions for brief time intervals, the emissions shall be limited to digital modes. Of course, CW emissions shall be permitted, as they are allowed in all of the amateur bands, and clearly provide a direct means of communication in order to "trouble-shoot" equipment problems. It is suggested that elements of the ITU regulations for the 30 meter band be used as a guideline in most issues, since there is a strong correlation in emission modes allowed. However, in order to allow propagation studies over the greatest possible range, it is suggested that PEP shall be allowed to exceed 200 watts. Interference with nearby frequency allocations would provide a basis of upper limitations of power.

The need for a "new" frequency allocation is not clearly revealed by the prior statements. However, since a "new" mode of propagation is being sought, it should be apparent that unknown and unintentional interference will be a real by-product as long distance paths are of special interest. It is noted that Sporadic-E propagation results in communications paths in excess of 1000 miles, while standard VHF propagation is only line-of-sight. Thus, it would be inconsistent to encourage studies of such propagation in existing frequency bands as they would increase interference.

If one were to speculate on potential problems created by such an allocation of a "new" frequency band, it would be that it would only tend to encourage usage by amateur radio operators interested in or attracted by unreliable and temporary VHF propagation paths over a long range, such as experimenters, DX operators, and Contesters. Yet it is assumed that none of these groups would be greatly disturbed by the potential interference problems since the personal rewards of the technical challenge to be gained through their QSOs would be greater. These groups are well known in their willingness to expend personal time, effort, and money in pursuit of their hobby. Thus, it seems reasonable to state if this frequency allocation is made as proposed, then this propagation mode which is often confused with Sporadic-E will be revealed. This will lead to scientific advancement in the field of radio science, and thus provide benefit to the public as a whole.

Respectfully,

A handwritten signature in black ink, reading "Alan J. Ames". The signature is written in a cursive, flowing style with a large initial 'A' and a stylized 'J'.

Alan J. Ames, N2ALE
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